BRUHAT BANGALORE MAHANAGARA PALIKE

Yelahanka Zone, Byatarayanapura Division

MEASUREMENT SHEET

POST MEASUREMENT

Name of Work:	Improvements to Hebbal and Sahakaranagara Kalyani in ward no. 8 Kodigehalli
Estimated Cost:	Rs. 25.00 Lakhs
Job Code / Indent No	008-20-000054
Head of Account:	P-3602 Special Development Works
Name of Agency:	M/s. KR Constructions
Amount put to Tender:	Rs.2230576.44
Amount Tender Price:	Rs. 1940600.82
Percentage:	(-0.13.00%) below excluding GST
Period of Completion:	90 days

Post-Measurements Recorded on: 30-06-2022

Sl. No.	Description	Unit	No	L (m)	B1 (m)	D/H (m)	Qty.	Quoted rate	Amount
1	Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, by manual means, in area of light jungle, removal of stumps, disposal of unserviceable materials, stacking of serviceable materials labour charges complete as per specifications								
	Quantity vide Pre measurement recorded in E-MB in page No. 1								
		sqm				Total	1074.00		
						Lim to	1070.00	9.22	9865.40
2	Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications.								
	Quantity vide Pre measurement recorded in E-MB in page No. 1								
		sqm				Total	741.00		
						Lim to	737.10	30.43	22429.95
3	Excavation in marshy soil upto 3m depth for foundations of structures as per drawing and technical specifications including removing the excavated stuff to a lead of 15m., including dewatering , shoring and shuttering, refilling trenches in 250mm layers, wherever necessary watering and ramming, including cost of all materials, labour complete as per specifications.								
	Quantity vide Pre measurement recorded in E-MB in page No. 2								
		sqm				Total	330.75		
						Lim to	324.45	726.48	235706.43
4	Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications.								
	Quantity vide Pre measurement recorded in E-MB in page No. 2								
		sqm				Total	105.57		
						Lim to	54.54	229.63	12524.02

Contractor

Junior Engineer
Ward no. 8

Assistant Executive Engineer
Kodigehalli Sub Division

Assistant Executive Engineer
Kodigehalli Sub Division

Sl. No.	Description	Unit	No	L (m)	B1 (m)	D/H (m)	Qty.	Quoted rate	Amount
5	Loading and Unloading of Stone Boulder / Stone aggregates /Sand/ Kanker / Moorum. KSRRB M100-1 : Placing tipper at loading point, loading with front end loader,dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications.								
	Quantity vide Pre measurement recorded in E-MB in page No. 2								
		sqm				Total	1116.09		
						Lim to	1116.09	83.00	92635.47
6	Removing and refixing stone slabs of drains and pointing in CM (1:3)								
	Quantity vide Pre measurement recorded in E-MB in page No.3								
		Tonnes				Total	493.80		
						Lim to	484.92	96.83	46954.80
9	Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.								
	Quantity vide Pre measurement recorded in E-MB in page No. 3								
		cum				Total	53.79		
						Lim to	29.30	4705.06	137858.25
12	Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density)						768.99		
	Quantity vide Pre measurement recorded in E-MB in page No. 4						768.99		
		cum				Total	184.00		
						Lim to	768.99	299.72	230481.68
7	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.								
	Eastern side - Hebbal kalyani								
	step 1 alround	Sqm	6	4.00	0.45		10.80		
	step 2 alround	Sqm	6	3.00	0.45		8.10		
	step 3 alround	Sqm	4	4.00	2.40		38.40		
	step 4 alround	Sqm	4	2.00	0.45		3.60		
	Western side - Hebbal kalyani	Sqm					0.00		
	step 1 alround	Sqm	8	1.00	0.45		3.60		
	step 2 alround	Sqm	5	2.00	0.45		4.50		
	step 3 alround	Sqm	6	4.00	2.40		57.60		
	step 4 alround	Sqm	6	3.00	0.45		8.10		
	Northern side - Hebbal kalyani	Sqm					0.00		

134.70

Executive Engineer, (BTP), BBMP.

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Contractor

Junior Engineer
Ward no. 8

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Assistant Executive Engineer
Kodigehalli Sub Division

Sl. No.	Description	Unit	No	L (m)	B1 (m)	D/H (m)	Qty.	Quoted rate	Amount
	step 1 alround	Sqm	6	1.00	0.45		2.70		
	step 2 alround	Sqm	8	2.00	0.45		7.20		
	step 3 alround	Sqm	6	4.00	2.40		57.60		
	step 4 alround	Sqm	6	3.00	0.45		8.10		
	Southern side-Hebbal kalyani	Sqm					0.00		
	step 1 alround	Sqm	7	1.00	0.45		3.15		
	step 2 alround	Sqm	4	1.00	0.45		1.80		
	step 3 alround	Sqm	2	2.00	2.40		9.60		
	step 4 alround	Sqm	4	2.00	0.45		3.60		
		Sqm				Total	228.45		
						Lim to	207.82	841.05	174787.01
8	Providing one line dressing to granite stone slab / granite stone masonry as per specifications								
	Qty vide item No. 6	Sqm					484.92		
	Qty vide item No. 7	Sqm					207.82		
		Sqm					692.74		
						Total	692.74		
						Lim to	692.74	827.21	573041.45
10	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications.								
	Sahakarnagar kalyani	Cum	1	2.25	3.00	0.20	1.35		
	Sahakarnagar kalyani	Cum	2	2.25	0.45	0.15	0.30		
		Cum	2	3.00	0.45	0.15	0.40		
	Fencing side	Cum	6	2.00	0.45	0.15	0.81		
						Total	2.86		
						Lim to	2.70	5000.17	13500.45
11	Providing and laying Pitching on slopes laid over prepared filter media including boulder apron laid dry in frorit of toe of embankment complete as per drawing and Technical specifications A. Stone / Boulder MORTH Specification								
	Eastern side	Cum	2	9.10	2.90	0.30	15.83		
	Western side	Cum	2	9.10	2.90	0.30	15.83		
	Northern side	Cum	2	9.10	2.90	0.30	15.83		
	Southern side	Cum	2	9.10	2.90	0.30	15.83		
						Total	63.32		
						Lim to	63.06	1487.51	93802.56

Executive Engineer, (BTP), BBMP.

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Executive Engineer, (BTP), BBMP.

Contractor

Junior Engineer
Ward no. 8

Assistant Executive Engineer
Kodigehalli Sub Division

Sl. No.	Description	Unit	No	L (m)	B1 (m)	D/H (m)	Qty.	Quoted rate	Amount
13	Providing and laying heavy duty cobble stones 60mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications.								
	Walking track-hebbal kalyani	Sqm							
	Eastern side	Sqm	1	34.00	2.40		81.60		
	Western side	Sqm	1	34.00	3.25		110.50		
	Northern side	Sqm	1	34.00	2.10		71.40		
	Southern side	Sqm	1	34.00	2.60		88.40		
						Total	351.90		
						Lim to	181.80	971.08	176542.34
14	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete								
	Eastern side	No.	90				90.00		
						Total	90.00		
						Lim to	89.00	376.26	33487.14
15	Providing and applying ready mix priming coat over concrete / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications.								
	for kerbs	Sqm	2	20.00		0.35	14.00		
						Total	14.00		
						Lim to	14.00	34.12	477.68
16	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications.								
	Qty vide item No. 15	Sqm					14.00		
						Total	14.00		
						Lim to	14.00	73.78	1032.92
17	Providing chain link fencing 50mm size of 8 guage properly stretched between existing rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint								
	Sahakarnagara kalyani	Sqm	2	7.50		1.80	27.00		
		Sqm	2	8.00		1.80	28.80		

Executive Engineer, (BTP), BBMP.

Assistant Executive Engineer Kodigehalli Sub Division BBMP, Bangalore

Contractor

Junior Engineer
Ward no. 8

Assistant Executive Engineer
Kodigehalli Sub Division

Sl. No.	Description	Unit	No	L (m)	B1 (m)	D/H (m)	Qty.	Quoted rate	Amount
						Total	55.80		
						Lim to	55.80	659.37	36792.84
18	Supplying and fixing M.S. Rectangular poles made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1:2:4) WITH 2 NOS 16mm dia M.S. hold fast rods each of length 25 cms. Including cost of all materials cutting, bending scaffolding wherever necessary, nicely finishing the welded joints with all lead lifts and as per the directions of the Engineerin - charge of the work and including providing 2 coats of approved quality paint over one coat of shop painting (excluding cost of earthwork and concrete)								
	Sahakarnagara kalyani	Rm	16	2.00			32.00		
						Total	32.00		
						Lim to	32.00	792.17	25349.44
19	Providing and fixing M.S. Block pipe of 38mm dia, of heavy guage of 14 including removing the bends, cutting the pipe, and fixing pipe in between the existing two verticle poles (M.S. rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting, and scaffolding wherever necessary with all lead and lift as directed by the Engineer-in-charge of work etc., complete including two coats of approved quality paint over one coat of shop paint.								
		Rm	2	31.00			62.00		
						Total	62.00		
						Lim to	62.00	376.26	23328.12
	Sub Total-1								**1940597.77**
	Add GST charges @ 12%								232871.73
	Total Rs								**2173469.50**

Round off: 2173000.00

30/6/22
Executive Engineer, (BTP), BBMP.

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Contractor

Junior Engineer
Ward no. 8

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

BRUHAT BANGALORE MAHANAGARA PALIKE

Yelahanka Zone, Byatarayanapura Division

MEASUREMENT SHEET

PRE-MEASUREMENT

Name of Work:	Improvements to Hebbal and Sahakaranagara Kalyani in ward no. 8 Kodigehalli
Estimated Cost:	Rs. 25.00 Lakhs
Job Code / Indent No	008-20-000054
Head of Account:	P-3602 Special Development Works
Name of Agency:	M/s. KR Constructions
Amount put to Tender:	Rs.2230576.44
Amount Tender Price:	Rs. 1940600.82
Percentage:	(-0.13.00%) below excluding GST
Period of Completion:	90 days

Sl. No.	Description	Unit	No	L (m)	B (m)	D/H (m)	Qty.	Remarks
Pre-Measurements Recorded on:								
1	Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, by manual means, in area of light jungle, removal of stumps, disposal of unserviceable materials, stacking of serviceable materials labour charges complete as per specifications							
	Hebbal Kalyani area	Sqm	1	38.00	12.00		456.00	
		Sqm	1	38.00	11.00		418.00	
	Sahakarnagar Kalyani area	Sqm	2	10.00	10.00		200.00	
		Sqm				Total	1074.00	
						Lim to	1070.00	
Pre-Measurements Recorded on:								
2	Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications.							
	Debris clearing in kalyani	Cum	8	18.00	3.00	0.70	302.40	
		Cum	4	10.00	4.00	0.80	128.00	
		Cum	4	10.00	3.80	0.80	121.60	
		Cum	5	15.00	3.60	0.70	189.00	
		Cum				Total	741.00	
						Lim to	737.10	

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Contractor

Junior Engineer
Ward no. 8

Assistant Executive Engineer
Kodigehalli Sub Division

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Sl. No.	Description	Unit	No	L (m)	B (m)	D/H (m)	Qty.	Remarks
Pre-Measurements Recorded on:								
3	Excavation in marshy soil upto 3m depth for foundations of structures as per drawing and technical specifications including removing the excavated stuff to a lead of 15m., including dewatering , shoring and shuttering, refilling trenches in 250mm layers, wherever necessary watering and ramming, including cost of all materials, labour complete as per specifications.							
	Debris clearing in kalyani							
	Hebbal Kalyani area	Cum	1	18.00	18.00	1.00	324.00	
	Sahakarnagar kalyani area	Cum	1	2.25	3.00	1.00	6.75	
		Cum				Total	330.75	
						Lim to	324.45	
Pre-Measurements Recorded on:								
4	Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications.							
	Walking track-hebbal kalyani							
	Eastern side	Cum	1	34.00	2.40	0.30	24.48	
	Western side	Cum	1	34.00	3.25	0.30	33.15	
	Northern side	Cum	1	34.00	2.10	0.30	21.42	
	Southern side	Cum	1	34.00	2.60	0.30	26.52	
		Cum				Total	105.57	
						Lim to	54.54	
Pre-Measurements Recorded on:								
5	Loading and Unloading of Stone Boulder / Stone aggregates /Sand/ Kanker / Moorum. KSRRB M100-1 : Placing tipper at loading point, loading with front end loader,dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications.							
	Qty vide item no. 2	Cum					737.10	
	Qty vide item no. 3	Cum					324.45	
	Qty vide item no. 4	Cum					54.54	
	Total	Cum				Total	1116.09	
						Lim to	1116.09	

Contractor

Junior Engineer
Ward no. 8

Assistant Executive Engineer
Kodigehalli Sub Division

Sl. No.	Description	Unit	No	L (m)	B (m)	D/H (m)	Qty.	Remarks
Pre-Measurements Recorded on:								
6	Removing and refixing stone slabs of drains and pointing in CM (1:3)							
	Eastern side - Hebbal kalyani							
	step 1 alround	Sqm	6	8.00	0.45		21.60	
	step 2 alround	Sqm	6	6.00	0.45		16.20	
	step 3 alround	Sqm	4	8.00	2.40		76.80	
	step 4 alround	Sqm	4	4.00	0.45		7.20	
	Western side - Hebbal kalyani							
	step 1 alround	Sqm	8	4.00	0.45		14.40	
	step 2 alround	Sqm	5	6.00	0.45		13.50	
	step 3 alround	Sqm	6	8.00	2.40		115.20	
	step 4 alround	Sqm	6	7.00	0.45		18.90	
	Northern side - Hebbal kalyani							
	step 1 alround	Sqm	6	3.00	0.45		8.10	
	step 2 alround	Sqm	8	6.00	0.45		21.60	
	step 3 alround	Sqm	6	8.00	2.40		115.20	
	step 4 alround	Sqm	6	7.00	0.45		18.90	
	Southern side-Hebbal kalyani							
	step 1 alround	Sqm	7	4.00	0.45		12.60	
	step 2 alround	Sqm	4	3.00	0.45		5.40	
	step 3 alround	Sqm	2	4.00	2.40		19.20	
	step 4 alround	Sqm	4	5.00	0.45		9.00	
		Sqm				Total	493.80	
						Lim to	484.92	
Pre-Measurements Recorded on:		08/04/2022						
9	Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.							
	Walking track-hebbal kalyani							
	Eastern side	Cum	1	34.00	2.40	0.15	12.24	
	Western side	Cum	1	34.00	3.25	0.15	16.57	
	Northern side	Cum	1	34.00	2.10	0.15	10.71	
	Southern side	Cum	1	34.00	2.60	0.15	13.26	
	Sahakaranagar kalyani	Cum	1	2.25	3.00	0.15	1.01	
		Cum				Total	53.79	
						Lim to	29.30	

Contractor

Junior Engineer
Ward no. 8

Assistant Executive Engineer
Kodigehalli Sub Division

Assistant Executive Engine
Kodigehalli Sub Divisi

Sl. No.	Description	Unit	No	L (m)	B (m)	D/H (m)	Qty.	Remarks
Pre-Measurements Recorded on:		18-4-22						
12	Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density)							
	Eastern side	Cum	1	25.00	9.00	0.90	202.50	
	Western side	Cum	1	24.50	8.50	0.90	187.42	
	Northern side	Cum	1	25.50	9.00	0.85	195.07	
	Southern side	Cum	1	25.00	9.20	0.80	184.00	
		Cum				Total	768.99	
						Lim to	768.99	

Contractor

Junior Engineer
Ward no. 8

Assistant Executive Engineer
Rajarajeshwari Sub Division
BBMP, Bangalore